

WHAT IS CLAIMED IS:

1. A CDMA receiver, comprising:

5 a path search section for receiving signals from a plurality of base stations, and specifying finger allocation according to delay profiles of respective branch signals received from the plural base stations;

10 a plurality of fingers which are allocated to the branch signals based on the finger allocation specified by the path search section; and

15 a rake receiving section for maximal- ratio- combining the power of a plurality of signals obtained from the fingers, which have been distributed due to their respective delays;

wherein the path search section includes a path management section to search for paths in response to the branch signals, and stores detected path information in a detected path table storing area in a memory; and

15 wherein the number of paths which the path management section searches for is changed according to the number of received branch signals.

2. The CDMA receiver claimed in claim 1, wherein, in the
20 detected path table storing area, memory area and the address of memory area for storing detected path information with respect to each branch signal are changed according to the number of branch signals.

3. The CDMA receiver claimed in claim 1, wherein the
25 number of paths which the path management section searches for with respect to each branch signal is found out by adding the number of candidate paths for path switching to a value obtained by dividing the number of the fingers by the number of the received branch signals.

30 4. The CDMA receiver claimed in claim 2, wherein the

number of paths which the path management section searches for with respect to each branch signal is found out by adding the number of candidate paths for path switching to a value obtained by dividing the number of the fingers by the number of the received branch signals.

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5. A path management method with the use of a CDMA receiver, comprising:

a path search section for receiving signals from a plurality of base stations, and specifying finger allocation according to delay profiles
10 of respective branch signals received from the plural base stations;

a plurality of fingers which are allocated to the branch signals based on the finger allocation specified by the path search section; and

a rake receiving section for maximal- ratio- combining the power of a plurality of signals obtained from the fingers, which have been
15 distributed due to their respective delays;

wherein the operation of the path search section involves:

a path management step for searching for paths in response to the branch signals;

a path information storing step for storing detected path
20 information in a detected path table storing area; and

a path number finding step for finding the number of paths to be searched at the path management step according to the number of received branch signals.

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6. The path management method claimed in claim 5, wherein, at the path information storing step, in the detected path table storing area, memory area and the address of memory area for storing detected path information with respect to each branch signal are changed according to the number of branch signals.

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7. The path management method claimed in claim 5 wherein,
at the path number finding step, the number of paths to be searched with
respect to each branch signal is determined on the basis of the maximum
value of the products of the respective numbers of received branches and
5 the respective numbers of paths.

8. The path management method claimed in claim 6 wherein,
at the path number finding step, the number of paths to be searched with
respect to each branch signal is determined on the basis of the maximum
10 value of the products of the respective numbers of received branches and
the respective numbers of paths.

9. A path management program for a CDMA receiver,
comprising:

15 a path search section for receiving signals from a plurality of
base stations, and specifying finger allocation according to delay profiles
of respective branch signals received from the plural base stations;

a plurality of fingers which are allocated to the branch signals
based on the finger allocation specified by the path search section; and

20 a rake receiving section for maximal- ratio- combining the
power of a plurality of signals obtained from the fingers, which have been
distributed due to their respective delays;

wherein the path search section implements:

25 a path management process for searching for paths in response
to the branch signals;

a path information storing process for storing detected path
information in a detected path table storing area; and

30 a path number finding process for finding the number of paths
to be searched by the path management process according to the number
of received branch signals.

10. The path management program claimed in claim 9,
wherein, in the path information storing process, in the detected path
table storing area, memory area and the address of memory area for
5 storing detected path information with respect to each branch signal are
changed according to the number of branch signals.

11. The path management program claimed in claim 9,
wherein, in the path number finding process, the number of paths to be
10 searched with respect to each branch signal is determined on the basis of
the maximum value of the products of the respective numbers of received
branches and the respective numbers of paths.

12. The path management program claimed in claim 10,
15 wherein, in the path number finding process, the number of paths to be
searched with respect to each branch signal is determined on the basis of
the maximum value of the products of the respective numbers of received
branches and the respective numbers of paths.